
From: Takano, Leilani
To: Cobb, Coralie H CIV NAVFAC SW, SWEV; Campbell, Joseph A CAPT OASN (EI&E)
CC: David Tessler; Jacqueline Flores
Sent: 5/10/2016 2:16:21 AM
Subject: [Non-DoD Source] Fwd: Tuberolabium guamense conservation measures
Attachments: 5.2.2016 Recommended Mariana eight spot conservation measure.pdf

Captain Campbell and Coralie:

Per Dave Tessler's request to forward recommended conservation measures for the Mariana eight-spot butterfly, please see below.

Thanks,
Leilani

----- Forwarded message -----

From: **Takano, Leilani** <(b) (6)
Date: Mon, May 2, 2016 at 6:05 PM
Subject: Tuberolabium guamense conservation measures
To: David Tessler <(b) (6)
Cc: AnnMarie Gawel <(b) (6)
(b) (6)

Dave,

Today I met with Jackie and we discussed additional conservation measures for *Tuberolabium guamense* (orchid). As requested, I provide the following conservation measures, which are intended to minimize adverse effects to the orchid as a result of the Navy's proposed military build up on Guam.

- \fi-360 {\pntext *Protect the cluster of *T. guamense* within the northeast section (indicated on the map with red; see attachment). This area includes the majority of the known population of *T. guamense* in the wild. This area should be protected and managed as a permanent conservation area.
- \fi-360 {\pntext *To minimize fragmentation and edge effects, the Navy should establish an adequate buffer around the cluster of *T. guamense*. We recommend a buffer of a minimum of 100 feet from the individual orchids at the outer edge of the cluster. Before habitat is cleared adjacent to the cluster of orchids, we ask that Navy work with the U.S. Fish and Wildlife Service (Service) to ground-truth the 100-foot buffer with joint site visits and using GPS units and GIS maps.
- \fi-360 {\pntext *We understand that the Navy has proposed to salvage 2,000 orchids, and guarantees that 50 percent of 2,000 orchids would survive. We recommend that the assurance of survivorship is in reference to the relocated orchids in the wild (after the orchids are salvaged they would be relocated within the wild within a protected area).
- \fi-360 {\pntext *All *T. guamense* that Navy does not salvage within the construction footprint would be available for the Service and its contractors to salvage. The Service should be given adequate notice of at least 60 days of the opportunity and location of orchids on a map with its gps locations that the Navy cannot salvage. The Service and/or its contractors would have up to 45 days to salvage the orchids.

Please let Jackie and I know if you want to discuss the above.

Thank you,
Leilani

~~~~~

U.S. Fish and Wildlife Service  
Ecological Services - Mariana Islands Team  
Hagatna, Guam 96910